

KSAs and Standards
All Approved KSAs
Includes MCQ and Oral Examination KSAs

Last revised on 6/20/2014

KSA Code	KSA Description	Level
CI0	CLINICAL INFORMATICS	
	A. Develop and optimize department use of information systems to facilitate patient care. B. *Use specialized patient care technology, such as online resources, CPOE, discharge instructions, and prescription writing software, to facilitate patient care. C. Use electronic medical records and clinical information systems.	
CI1	Use necessary components of an electronic medical record (EMR)	C
CI2	Use an electronic medical record (EMR) system to enter and access information	C
CI3	Use computerized physician order-entry (CPOE) system	C
CI4	Implement strategies to address EMR/CPOE challenges, such as alert fatigue and inefficient work flow	A
CI5	View clinical information systems (Laboratory, ECG, PACS, Pharmacy)	C
CI6	Use online resources to help guide evidence-based care	B
CI7	Use computer applications such as discharge instructions, and prescription writing	C
CI8	Use alternative data management systems when electronic medical record systems are malfunctioning	C
CI9	Use communication systems such as electronic departmental tracking systems and handheld devices	B
CI10	Appropriately use electronic communications/social media as part of your medical practice	B
CI11	Use computerized clinical decision support	B
CI12	Recognize the risk of computer shortcuts (Level B)	B

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CO0	CONSULTATION	
	<p>A. *Evaluate and incorporate consultant recommendations into the treatment plan, as appropriate.</p> <p>B. Formulate a plan for consultation and communicate effectively to establish a plan and timeline for consultation.</p> <p>C. Identify appropriate cases where expert consultation is indicated.</p>	
CO1	Arrange necessary consultation with physicians and other professionals when needed	C
CO2	Evaluate and incorporate consultant recommendations into the treatment plan, as appropriate.	A
CO3	When working with an outside consultant, formulate and communicate a plan and timeline for consultation	B
CO4	Ensure timely evaluation and treatment from consultants	C
CP0	CONTRACT PRINCIPLES	
	<p>A. Participate in the development, revision, and negotiation of emergency medicine contracts</p> <p>B. *Participate in the negotiation and possible revision of one's own emergency medicine contract.</p> <p>C. Demonstrate an understanding of an emergency medicine employment contract.</p>	
CP1	Identify the language and intent of common clauses found in EM contracts	C
CP2	Compare and contrast the various employment models available to emergency physicians	C
CP3	Describe the various types of EM contracts, i.e., physician, hospital, professional liability, insurance, payer, etc.	C
CP4	Participate in EM contract negotiations using the principles of contract negotiation	A
CP5	Participate in EM contract development and revision	A
CP6	Use EM contracts and clauses to resolve disputes	A
CP7	Consult legal counsel as appropriate during contract negotiations	C

KSA Code	KSA Description	Level
CP8	Demonstrate an understanding of an emergency medicine employment contract	C
CP0	CONTRACT PRINCIPLES (continued)	
CP9	Participate in the negotiation and possible revision of one's own emergency medicine contract	B
CS0	COMMUNICATION & INTERPERSONAL SKILLS	
	<p>A. Identify and implement means by which to improve communication in ED-based and institutional healthcare teams.</p> <p>B. *Consider the expectations of those who provide or receive care in the ED and use communication methods that minimize the potential for stress, conflict, and miscommunication.</p> <p>C. Effectively communicate ED course and management plans to staff colleagues, primary care physicians, and accepting physicians, other healthcare providers, and patients and their significant others, with consideration of cultural background, health literacy, or barriers to communication.</p> <p>D. Elicit patients' reasons for seeking health care and expectations from the ED visit, and listen effectively to patients, families, and all members of the healthcare team.</p>	
CS1	Identify and implement means by which to improve communication in ED-based and institutional healthcare teams	A
CS2	Establish rapport with and demonstrate empathy toward patients and their families	C
CS3	Elicit patients' reasons for seeking health care and their expectations from the ED visit	D
CS4	Listen effectively to patients, families, and all member of the healthcare team	D
CS5	Communicate information to patients and families using verbal, nonverbal, written, and technological skills, and confirm understanding	C
CS6	Elicit information from patients, families, and other healthcare members using verbal, nonverbal, written, and technological skills	D
CS7	Consider the expectations of those who provide or receive care in the ED and use communication methods that minimize the potential for stress, conflict, and miscommunication	B
CS8	Recognize and resolve interpersonal conflict in the emergency department including conflicts with patients and family	B
CS9	Use feedback provided from others to improve communication skills	C
CS10	Communicate pertinent information to emergency physicians and other healthcare colleagues in transition of care	C

KSA Code	KSA Description	Level
CS0	COMMUNICATION & INTERPERSONAL SKILLS (continued)	
CS11	Use flexible communication strategies and adjust them based on the clinical situation to resolve specific ED challenges, including the following:	
CS11a	Drug seeking behavior	B
CS11b	Drug or alcohol impaired patients	C
CS11c	Altered mental status patients	C
CS11d	Delivering bad news, e.g., death notification, critical illness, unexpected outcomes, medical errors	B
CS11e	Difficulties with consultants	B
CS11f	Do not resuscitate/end of life decisions	C
CS11g	Patient's communication barriers, e.g., non-English speaking, hearing impaired	C
CS11h	High risk refusal-of-care patients	B
CS11i	Acutely psychotic patients	C
CS11j	Communicate with out-of-hospital and nonmedical personnel, e.g., police, media, hospital administrators	C
CS12	Effectively communicate ED course and management plans to staff colleagues, primary care physicians, accepting physicians, and other healthcare providers	C
CS13	Adjust interactions with staff according to factors such as culture, gender, age, language, disability, discipline, staff standing, and professional training to avoid bias and discrimination	C
CS14	Communicate risks, benefits, and alternatives to therapeutic interventions to patients and/or appropriate surrogates, and obtain consent when indicated	C
CS15	Solicit patient participation in medical decision-making by discussing charges, risks, potential benefits of, and alternatives to care provided	C
CS16	Negotiate effectively with staff, consultants, patients, families, and others to provide optimal patient care (Level B)	B

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DI0	DISPOSITION	
	<p>A. *Establish and implement a comprehensive disposition plan that uses appropriate consultation resources; patient education regarding diagnosis; treatment plan; medications; and time and location specific disposition instructions.</p> <p>B. Implement a treatment plan that includes discharge instructions, prescriptions, and follow-up instructions as appropriate.</p> <p>C. Formulate a disposition plan.</p>	
DI1	Formulate a specific follow-up plan	C
DI2	Conduct focused medication review at time of disposition	B
DI3	Educate patients and staff about individual medication	B
DI4	Summarize diagnosis, discharge plan, medications, and follow-up to patient or surrogate	A
DI5	Correctly assign admitted patients to an appropriate level of care	A
DM0	DISASTER MANAGEMENT	
	<p>A. Develop and evaluate an ED plan for various disasters and crisis management.</p> <p>B. *Manage the ED during disaster drills or event, evacuations, and crisis management.</p> <p>C. Participate in hospital disaster drills.</p>	
DM1	Identify Hospital Emergency Incident Command System (HEICS) roles and responsibilities	C
DM2	Participate in HEICS structure as required	C
DM3	Organize and manage an ED multi-casualty incident, surge, and/or hospital evacuation	B
DM4	Develop, evaluate, and implement a plan for containment of infectious or toxic agents in the ED	A
DM5	Prepare for a mass decontamination in anticipation of the arrival of victims of a HAZMAT exposure	B
DM6	Develop and evaluate an emergency response plan for the ED in the setting of disasters	A
DM7	Activate appropriate resources from local and federal agencies to respond to an ongoing disaster	B
DM8	Develop and evaluate a continuity plan to manage a critical reduction in staffing of an ED due to an emergency situation	A
DM9	Manage a mass casualty drill or event in an ED involving multiple patients, prioritizing care, containing potential exposures, and appropriately assigning resources	B

KSA Code	KSA Description	Level
DM0	DISASTER MANAGEMENT (continued)	
DM10	Develop and evaluate contingency strategies for crisis management, e.g., stress debriefing	A
DM11	Participate in a mass casualty drill or event in an ED involving multiple patients, prioritizing care, containing potential exposures, and appropriately assigning resources	C
DO0	DOCUMENTATION	
	<p>A. *Demonstrate clear and concise documentation that describes medical decision-making, ED course, and supports the development of the clinical impression and management plan.</p> <p>B. Demonstrate clear, concise, and timely documentation of history, physical exam, clinical impression, disposition, and ED course.</p> <p>C. Document the history, physical exam, clinical impression, and disposition appropriately.</p>	
DO1	Demonstrate clear, concise, and timely documentation of history, physical exam, clinical impression, disposition, and ED course	B
DO2	Document history, physical exam, clinical impression, and disposition in the medical record	C
DO3	Identify documentation strategies, such as hand-written, templates, dictation, or electronic records	B
DO4	Based on patient complexity, select the most appropriate documentation strategy such as hand-written, templates, dictation, or electronic records	B
DO5	Demonstrate clear and concise documentation that describes medical decision-making, ED course, and supports the development of the clinical impression and management plan	A
DS0	DIAGNOSTIC STUDIES	
	<p>A. *Apply the results of diagnostic testing based on the probability of disease and the likelihood of test results altering management.</p> <p>B. Interpret results of a diagnostic study, recognizing limitations and risks, seeking interpretive assistance when appropriate.</p> <p>C. Order and prioritize appropriate diagnostic studies using decision rules as appropriate. Perform appropriate bedside diagnostic studies and procedures.</p> <p>D. Determine necessity and urgency of diagnostic studies.</p>	
DS1	Prioritize essential testing	C

KSA Code	KSA Description	Level
DS2	Determine necessity and urgency of diagnostic studies	D
DS0	DIAGNOSTIC STUDIES (continued)	
DS3	Use diagnostic testing based on the pre-test probability of disease and the likelihood of test results altering management	A
DS4	Review risks, benefits, contraindications, and alternatives to a diagnostic study or procedure	B
DS5	Order appropriate diagnostic studies using decision rules as appropriate	C
DS6	Perform appropriate bedside diagnostic studies and procedures	C
DS7	Interpret results of a diagnostic study, recognizing limitations, seeking interpretive assistance when appropriate	B
DX0	DIAGNOSIS	
	<p>A. *Based on all of the available data, narrow and prioritize the list of weighted differential diagnoses to determine appropriate management.</p> <p>B. Synthesize the chief complaint, history, physical examination, and available medical information to develop a list of weighted differential diagnoses including those with the greatest potential for morbidity or mortality.</p> <p>C. Construct a list of potential diagnoses based on the chief complaint.</p>	
DX1	Synthesize chief complaint, history, physical examination, and available medical information to develop a differential diagnosis	B
DX2	Construct a list of potential diagnoses, based on the greatest likelihood of occurrence	B
DX3	Construct a list of the diagnoses with the greatest potential for morbidity or mortality	C
DX4	Revise a differential diagnosis in response to changes in a patient's condition over time	B
DX5	Based on all of the available data, narrow and prioritize the list of weighted differential diagnoses to determine appropriate management	A
DX6	Correctly identify acuity of emergency conditions	B

KSA Code	KSA Description	Level
ES0	EMERGENCY STABILIZATION	
	<p>A. Develop policies and protocols for the management and/or transfer of critically ill or injured patients.</p> <p>B. *Prioritize critical initial stabilization actions and mobilize hospital support services in the resuscitation of a critically ill or injured patient and reassess after stabilizing intervention.</p> <p>C. Discern relevant data to formulate a diagnostic impression and plan.</p> <p>D. Perform a primary assessment on a critically ill or injured patient.</p>	
ES1	Perform a primary assessment on a critically ill or injured patient	D
ES2	Prioritize vital critical initial stabilization actions in the resuscitation of a critically ill or injured patient	B
ES3	Reassess after stabilizing intervention	C
ES4	Call for the appropriate consultant in the setting of a patient whose condition requires it	C
ES5	Discern relevant data to formulate a diagnostic impression and plan	C
ES6	Recognize in a timely fashion when further clinical intervention is futile	B
ES7	Evaluate the validity of a DNR order	B
ES8	Initiate a DNR order	C
ES9	Integrate hospital support services into a management strategy for a problematic stabilization situation	B
ES10	Develop policies and protocols for the management and/or transfer of critically ill or injured patients	A

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FI0	FINANCIAL ISSUES	
	<p>A. Develop, implement, and monitor financial benchmarks; billing, coding, and reimbursement strategies; and physician compensation and benefit plans to assure smooth financial operations and optimize the financial well-being of the department.</p> <p>B. Participate in periodic review of financial and practice metrics and use these to help develop or revise departmental practices and guidelines that will improve financial operations, resource utilization, and reimbursement.</p> <p>C. *Modify personal practices and resource utilization based on review of available financial and practice metrics.</p> <p>D. Use appropriate resources, based on institutional policy and evidence-based guidelines, to provide cost-effective care.</p>	
FI1	Adhere to institutional policy and evidence-based guidelines for resource utilization	D
FI2	Use cost effective patient management strategies	D
FI3	Participate in continuous monitoring, and evaluation of financial benchmarks, including departmental budgets, financial statements, and provider payroll	B
FI4	Identify the reimbursement implications of medical record documentation	C
FI5	Recognize the relationship between reimbursement and basic coding methodologies, including evaluation and management (E/M) services, Physicians' Current Procedural Terminology (CPT), and Relative Value Scales/Units (RVS/RVUs)	C
FI6	Develop, implement, revise, or review equitable physician compensation and benefit plans	A
FI7	Modify personal practices and resource utilization based on review of available financial and practice metrics	C
HP0	PERFORMANCE OF FOCUSED HISTORY & PHYSICAL EXAM	
	<p>A. *Abstract current findings in a patient with multiple chronic medical problems and, when appropriate, compare with a prior medical record and identify significant differences between the current presentation and past presentations.</p> <p>B. Synthesize and prioritize essential data necessary for the correct management of patients using all potential sources of data.</p> <p>C. Perform a focused history and physical exam.</p>	
HP1	Perform a focused history and physical exam	C

KSA Code	KSA Description	Level
HP0	PERFORMANCE OF FOCUSED HISTORY & PHYSICAL EXAM (continued)	
HP2	Prioritize essential components of a history given a limited or dynamic circumstance	B
HP3	Prioritize essential components of a physical examination given a limited or dynamic circumstance	B
HP4	Synthesize essential data necessary for the correct management of patients using all potential sources of data	B
HP5	Abstract and compare current findings in a patient with multiple chronic medical problems with a prior medical record and identify significant differences between the current presentation and past presentations, such as acute complaints, etc.	A
KT0	KNOWLEDGE TRANSLATION	
	<p>A. Performs original research to answer a clinical question.</p> <p>B. Identifies need for departmental improvements and develops evidence-based processes to improve ED patient care.</p> <p>C. *Identifies personal knowledge gap and applies evidence to decision-making for individual patients.</p> <p>D. Acquires basic information when directed by others.</p>	
KT1	Perform original research to answer a clinical question	A
KT2	Apply the evidence to decision-making for individual patients	C
KT3	Appraise the evidence for validity and usefulness	C
KT4	Acquire the best evidence	D
KT5	Ask answerable questions for emerging information needs	D
KT6	Identify personal knowledge gap	C
LI0	LEGAL ISSUES	
	<p>A. Develop and implement department or hospital policy for legal resolution.</p> <p>B. *Apply key regulations governing the practice of EM.</p>	
LI1	Adhere to all legal and ethical obligations when managing a victim of abuse or neglect, including child, spousal, or elder, whether sexual, physical, or both	B
LI2	Apply key regulations governing the practice of EM	B

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MF0	MODIFYING FACTORS	
	*Adjust treatment of patients according to factors such as culture, gender, age, language, disability, and social status.	
MF1	Adjust treatment of patients according to factors such as culture, gender, age, language, disability, and social status	A
MP0	MULTIPLE PATIENT CARE	
	<p>A. *Mobilize and manage necessary personnel and other hospital resources, to meet critical needs of multiple patients.</p> <p>B. Mobilize, and manage department staff and resources to meet critical needs of multiple patients.</p> <p>C. Triage, manage, and develop disposition for multiple patients.</p>	
MP1	Triage multiple patients simultaneously	C
MP2	Manage multiple patients simultaneously	C
MP3	Disposition multiple patients simultaneously	C
MP4	Simultaneously manage residents, mid-level providers, nursing staff, students, and other ED staff as necessary to run an efficient ED	B
MP5	Mobilize necessary personnel and other hospital resources to meet ED needs, including consultants, back-up attending physicians and residents, and mid-level providers	A
OP0	OPERATIONS	
	<p>A. Develop inter-departmental solutions to process/operational problems.</p> <p>B. Develop departmental solutions to process/operational problems.</p> <p>C. *Participate in solving departmental process/operational problems.</p> <p>D. Employ processes that improve patient care satisfaction and flow.</p>	
OP1	Develop inter-departmental solutions to process/operational problems.	A
OP2	Employ processes, personnel, and technologies that optimize safe, timely, efficient, effective, equitable, and patient-centered care	D
OP3	Perform departmental leadership responsibilities in a collaborative manner	B
OP4	Participate in solving departmental process/operational problems	C

KSA Code	KSA Description	Level
OP0	OPERATIONS (continued)	
OP5	Create departmental flow metrics from benchmarks, best practices, and dashboards	B
OP6	Employ processes and logistics to improve patient flow and decrease turnaround times, e.g., rapid triage, bedside registration, Fast Tracks, bedside testing, rapid treatment units, standard protocols, and observation units	D
OP7	Implement effective staffing models for different areas of the ED	B
OP8	Develop criteria for identification of sentinel events	B
OP9	Use strategies to enhance patient satisfaction	D
OP10	Participate in the design or modification of the ED	B
OP11	Participate in recruitment, credentialing, and orientation activities	C
OP12	Participate in institutional accreditation activities	C
OR0	OBSERVATION & REASSESSMENT	
	<p>A. Develop protocols for patients undergoing ED observation to ensure quality of care, and monitor clinical outcomes, admission rates, and other resource utilization.</p> <p>B. *Re-evaluate patients <u>undergoing</u> ED observation and, using appropriate data and resources, determine differential diagnosis, treatment plan, and disposition.</p> <p>C. Treat and reassess appropriate patients undergoing ED observation.</p> <p>D. Identify which patients are appropriate for ED observation.</p>	
OR1	Identify which patients are appropriate for observation in the ED	D
OR2	Monitor a patient's clinical status at timely intervals during observation in the ED	C
OR3	Evaluate effectiveness of therapies and treatments provided during observation	B
OR4	Consider additional diagnoses and therapies for a patient who is under observation and change treatment plan accordingly	B
OR5	Identify and comply with federal and other regulatory requirements, including billing, which must be met for a patient who is under observation	A
OR6	Develop protocols for patients undergoing ED observation to ensure quality of care, and monitor clinical outcomes, admission rates, and other resource utilization.	A

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PE0	PREVENTION & EDUCATION	
	<p>A. Develop educational tools for a healthy lifestyle, risk prevention, and the importance of the continuum of care.</p> <p>B. *Educate patients and families regarding presentation specific risk prevention, healthy lifestyle, and the importance of the continuum of care.</p> <p>C. Recognize risk factors and give appropriate discharge instructions for a specific diagnosis.</p>	
PE1	Recognize risk factors for a specific medical or surgical diagnosis	C
PE2	Identify preventive measures to delay illness, or prevent trauma	B
PE3	Educate patients regarding preventive measures to improve lifestyle, delay illness, or prevent trauma and to optimize patient outcomes	B
PE4	Explain clearly to the patient the importance of lifestyle improvement and the continuum of care, including follow-up	B
PE5	Develop educational tools for a healthy lifestyle, risk prevention, and the importance of the continuum of care	A
PF0	PROFESSIONAL ISSUES	
	<p>A. Develop and implement department or hospital policy for professional resolution.</p> <p>B. *Treat patients, families, staff, and consultants with respect, honesty, and dignity, demonstrating sensitivity to a patient's needs, and acknowledge and discuss medical errors with patients and colleagues.</p> <p>C. Demonstrate professional behavior and adhere to ethical principles relevant to the practice of medicine.</p>	
PF1	Recognize a hostile work environment, including sexual harassment, and implement department or hospital policy for resolution	A
PF2	Arrive on time and dress professionally	C
PF3	Complete medical records accurately and in a timely manner	C
PF4	Demonstrate knowledge of recent Emergency Medicine-related literature	B
PF5	Demonstrate professional demeanor when dealing with patients, consultants, and peers	C
PF6	Recognize and report impairment in a colleague in a professional and confidential manner	C

KSA Code	KSA Description	Level
PF0	PROFESSIONAL ISSUES (continued)	
PF7	Recognize and formulate an appropriate plan to address impairment in a colleague in a professional and confidential manner	B
PF8	Demonstrate patient advocacy	C
PF9	Treat patient, family, staff, and consultants with respect, honesty, and dignity	C
PF10	Demonstrate sensitivity to a patient's pain, emotional states, and individuality	C
PF11	Acknowledge and discuss medical errors with patients and colleagues according to principles of responsibility and accountability	B
PF12	Recognize a medical error that constitutes a sentinel event and ensure notification of the hospital quality improvement team	C
PF13	Maintain confidentiality of patient information	C
PF14	When addressing refusal of care/AMA, assess patient decision-making capacity and provide and document complete information about relevant risks, benefits, alternatives, and follow-up	C
PF15	Follow appropriate hospital and EMTALA guidelines when transferring or accepting patients that are appropriate, including completion of all necessary communication and documentation	C
PF16	Recognize and avoid inappropriate influences of marketing and advertising	C
PF17	Recognize and disclose conflicts of interest	C
PF18	Participate in complaint management and service recovery	B
PF19	Manage your own fatigue and/or impairment issues	C
PF20	Assist others in your department in managing their fatigue and/or impairment issues	B
PF21	Design and implement a plan to manage fatigue and/or impairment issues for the emergency department staff	A
PF22	Use time management/organizational skills	C
PF23	Ensure work/life balance in your practice	C
PF24	Manage your own work dysphoria (burn-out) issues	C

KSA Code	KSA Description	Level
PF0	PROFESSIONAL ISSUES (continued)	
PF25	Assist others in your department in managing their work dysphoria (burn-out) issues	B
PF26	Design and implement a plan to manage work dysphoria (burn-out) issues for the emergency department staff	A
PF27	Understand liability and litigation issues	C
PF28	Understand the various types of professional liability insurance issues	C
PF29	Adhere to ethical principles relevant to the practice of medicine	C
PF30	Recognize how own personal beliefs and values impact medical care	B
PH0	PREHOSPITAL CARE	
	<p>A. Create standard operating procedure documents and prehospital medical protocols for EMS.</p> <p>B. *Provide medical direction that requires EM physician level of experience that allows deviation from standard protocols to different levels of prehospital providers.</p> <p>C. Follow prehospital medical protocols for EMS.</p>	
PH1	Create standard operating procedure documents and prehospital medical protocols for EMS	A
PH2	Follow standard operating procedure documents and prehospital medical protocols for EMS	C
PH3	Provide medical direction that requires EM physician level of experience beyond standard prehospital medical protocols for prehospital providers, when appropriate	B
PH4	Provide appropriate medical direction to different levels of prehospital providers	B
PH5	Remotely manage care on a continuous or intermittent basis for EMS patients who have prolonged transport times to the hospital	B
PI0	PERFORMANCE IMPROVEMENT	
	<p>A. Develop and evaluate measures of professional performance and process improvement and implement them to improve departmental practice.</p> <p>B. *Participate in performance improvement to optimize ED function.</p> <p>C. Participate in a performance improvement evaluation for self-improvement.</p> <p>D. Adhere to department standards.</p>	

KSA Code	KSA Description	Level
PI0	PERFORMANCE IMPROVEMENT (continued)	
PI1	Participate in ongoing and focused professional practice evaluation and monitoring, such as the following:	
PI1a	Patient satisfaction	D
PI1b	Customer satisfaction (excludes patients)	D
PI1c	Patient safety	D
PI1d	Practice self-improvement	C
PI1e	Operational efficiency	B
PI1f	Lifelong learning	C
PI1g	Patient outcomes	C
PI2	Collect data to evaluate clinical care delivery	C
PI3	Compare clinical care delivery data to local or national standards of practice	D
PI4	Respond to data regarding clinical care by modifying practice to optimize performance	C
PI5	Collect data regarding clinical care delivered after modifying practice to evaluate the effectiveness of the modification	C
PI6	Disclose errors via institutionally supported mechanisms	D
PI7	Participate in departmental initiatives to optimize practice based on case reviews	B
PI8	Use analytical tools to assess healthcare quality and safety and reassess quality improvement programs for effectiveness	A
PI9	Develop and evaluate measures of professional performance and process improvement and implement them to improve departmental practice	A
PI10	Use core measures data to articulate a plan for process improvement	B
PI11	Participate in a process improvement plan to optimize ED practice	B
PI12	Adhere to standards for maintenance of a safe working environment	D
PI13	Measure physician performance using standard methods, including complaint responses	B

KSA Code	KSA Description	Level
PI14	Participate in evaluation processes and use tools that assess communication and interpersonal skills, such as patient satisfaction surveys, staff surveys, etc.	C
PR0	GENERAL APPROACH TO PROCEDURES	
	<p>A. *Perform the indicated procedure on all appropriate patients (including those who are uncooperative, at the extremes of age, hemodynamically unstable and those who have multiple co-morbidities, poorly defined anatomy, high risk for pain or procedural complications, sedation requirement), and take steps to avoid potential complications, and recognize the outcome and/ or complications resulting from the procedure.</p> <p>B. Perform the indicated procedure on a patient who has a moderate risk for complications, moderate need for pain control or anxiolysis, or moderate urgency, and recognize the outcome and/ or complications resulting from the procedure.</p> <p>C. Perform the indicated procedure safely and effectively in ideal circumstances, including a cooperative patient with no comorbidities, normal anatomy, hemodynamically stable, low risk for pain or procedural complications, no sedation required, and low urgency, and recognize the outcome and/ or complications resulting from the procedure.</p>	
PR1	Perform the indicated procedure in any circumstance, take steps to avoid potential complications, and recognize the outcome and/or complications resulting from the procedure	A
PR2	Perform the indicated procedure on an uncooperative patient, patient at the extremes of age (pediatric, geriatric), multiple co-morbidities, poorly defined anatomy, hemodynamically unstable, high risk for pain or procedural complications, sedation required, or emergent indication to perform procedure, and recognize the outcome and/ or complications resulting from the procedure	A
PR3	Perform the indicated procedure on a patient who has identifiable landmarks, moderate risk for complications, moderate pain control or anxiolysis required, or moderate urgency, and recognize the outcome and/ or complications resulting from the procedure	B
PR4	Identify the pertinent anatomy and physiology for a specific procedure	C
PR5	Perform the appropriate procedures on the appropriate patient following institutional policies and guidelines	C
PR6	Use universal protocol prior to performing a procedure, e.g., timeout, site marking, patient identification, informed consent	C
PR7	Recognize the indications, contraindications, alternatives, and potential complications for a procedure	C
PR8	Ensure availability of the personnel, equipment, and/or medications necessary to perform a procedure	C
PR9	Obtain informed consent from the patient or surrogate when appropriate	C

KSA Code	KSA Description	Level
PR10	Perform the indicated procedure competently	C
PR0	GENERAL APPROACH TO PROCEDURES (continued)	
PR11	Identify any complications resulting from a procedure (29.8)	C
PR12	Address any complications resulting from a procedure (29.9)	C
PR13	Determine a backup strategy if initial attempts to perform a procedure are unsuccessful (29.10)	C
PT0	PHARMACOTHERAPY	
	<p>A. *Select, prescribe, and be aware of adverse effects of appropriate pharmaceutical agents based upon relevant considerations such as mechanism of action, intended effect, financial considerations, possible adverse effects, patient preferences, allergies, potential drug-food and drug-drug interactions, institutional policies, and clinical guidelines; and monitor and intervene in the advent of adverse effects in the ED.</p> <p>B. Select and prescribe appropriate pharmaceutical agents based on intended effect, patient allergies, and potential drug-food and drug-drug interactions.</p> <p>C. Select and prescribe appropriate pharmaceutical agents based on intended effect and patient allergies.</p> <p>D. Prescribe common classes of pharmacotherapy</p>	
PT1	Select the appropriate agent based on mechanism of action, intended effect, possible adverse effects, patient preferences, allergies, potential drug-food and drug-drug interactions, financial considerations, institutional policies, and clinical guidelines, including patient's age, weight, and other modifying factors	A
PT2	Identify relative and absolute contraindications to specific pharmacotherapy	B
PT3	Identify the anticipated response of clinical conditions to specific therapies with consideration for alternative therapies if the desired response is not achieved	B
PT4	Recognize and discontinue agents that may be causing an adverse effect	C
PT5	Treat adverse effects of pharmacotherapy	C

KSA Code	KSA Description	Level
PT0	PHARMACOTHERAPY (continued)	
PT6	Pharmacotherapy: Prescribe the Following Classes of pharmacotherapy	
PT6a	Antimicrobials	D
PT6b	Analgesics	D
PT6c	Cardiovascular medications	D
PT6d	Pulmonary medications	D
PT6e	Gastrointestinal medications	D
PT6f	Psychiatric medications	D
PT6g	Dermatologic medications	D
PT6h	Fluids and electrolytes	D
PT6i	Antiallergic medications	D
PT6j	Other medications	D
RE0	RESEARCH	
	<p>A. Design, implement, and publish research protocols.</p> <p>B. Assist with research via patient enrollment and data collection and comply with local and national research regulations.</p> <p>C. *Critically evaluate published research and use it to improve the practice of EM.</p>	
RE1	Critically appraise and apply medical literature to improve patient care, self-assessment, and peer-education	C
RE2	Complete the steps involved in the following areas of EM research:	
RE2a	Study design and implementation	A
RE2b	Institutional Review Board (IRB) approval	A
RE2c	Data management and analysis	A
RE2d	Manuscript preparation and submission	A
RE3	Comply with the rules of Institutional Review Boards (IRBs) and animal use committees	B
RE4	Enroll patients and collect data to assist others with research studies	B

KSA Code	KSA Description	Level
SM0	SYSTEMS-BASED MANAGEMENT	
	<p>A. Develop and implement strategies to assess and improve healthcare delivery within the hospital system and community.</p> <p>B. Develop and implement strategies to assess and improve departmental healthcare delivery and flow.</p> <p>C. *Participate in strategies to improve departmental healthcare delivery and flow.</p> <p>D. Deliver safe, timely, effective, efficient, equitable, patient-centered care.</p>	
SM1	Develop and implement strategies to assess and improve departmental healthcare delivery and flow	B
SM2	Assist patients in navigating the healthcare system	D
SM3	Recommend strategies by which patients' access to care can be improved	C
SM4	Ensure optimal patient support, both immediately and in follow-up, by interacting with community support resources, including advocacy groups, sexual assault (SANE, SAFE) programs, police, legal system, and clinics	D
SM5	Use mechanisms to institute ED and/or hospital diversion to ensure safe patient care	C
SM6	Use mechanisms to coordinate ED care among hospitals to prevent overcrowding	A
SM7	Lead or participate in programs that educate patients and the community about injury and illness prevention	A
SM8	Mobilize institutional resources to assist patients with challenging social and ethical situations	D
SM9	Adhere to public health reporting requirements	D
SM10	Advocate for EM and patients in the hospital and the community	A
SM11	Address the differing customer needs of patients, hospital, medical staff, EMS, and the community	A
SM12	Address end-of-life issues including advance directives	D
TE0	TEACHING	
	<p>A. Design teaching and learning events geared towards specific audiences.</p> <p>B. Evaluate teaching effectiveness and modify teaching strategies accordingly.</p> <p>C. *Teach using targeted learning objectives.</p> <p>D. Teach other providers in the clinical setting.</p>	

KSA Code	KSA Description	Level
TE0	TEACHING (continued)	
TE1	Analyze audience and learning objectives	B
TE2	Design audience-appropriate teaching events	A
TE3	Implement teaching strategies	C
TE4	Evaluate effectiveness of teaching	B
TE5	Teach other providers	D
TE6	Provide educational feedback to other members of the healthcare team to improve healthcare delivery	D
TI0	THERAPEUTIC INTERVENTIONS	
	<p>A. Develop protocols to avoid potential complications of interventions.</p> <p>B. *Assess the success and potential complications of interventions, and employ strategies to ensure success and avoid complications.</p> <p>C. Develop a strategy and perform therapeutic interventions, using appropriate adjuncts.</p> <p>D. Recognize when a therapeutic intervention is indicated as part of a patient management plan and ensure that it is performed.</p>	
TI1	Recognize when a therapeutic intervention is indicated as part of a patient management plan	D
TI2	Develop a strategy for performing therapeutic interventions	C
TI3	Interpret and discuss outcomes of therapeutic interventions	B
TI4	Use adjuncts to therapeutic interventions appropriately, including, but not limited to bedside ultrasound and procedural sedation and analgesia (PSA)	C
TI5	Ensure that therapeutic interventions are performed	D
TI6	Develop protocols to avoid potential complications of interventions	A

KSA Code	KSA Description	Level
TM0	TEAM MANAGEMENT	
	<p>A. Lead inter- and intra-departmental groups in the patient care setting and in collaborative meetings outside of the patient care setting.</p> <p>B. Lead and evaluate departmental patient care teams and develop strategies to overcome team limitations.</p> <p>C. *Lead patient-centered care teams, ensuring effective communication and mutual respect among members of the team.</p> <p>D. Participate as a member of a patient care team.</p>	
TM1	Organize patient care teams	B
TM2	Evaluate team performance	B
TM3	Recognize team limitations	C
TM4	Recommend changes in team performance as necessary for optimal efficiency	C
TM5	Develop strategies to overcome team limitations	C
TM6	Ensure clear communication among team members	C
TM7	Ensure respect between all team members	C
TM8	Participate in and lead interdepartmental groups in the patient setting and in collaborative meetings outside of the patient care setting	A
TM9	Participate as a member of a patient care team	D